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INAME: MOODY, Juanita **Text w/Tape:**

IPLACE: NSA, Ft. Meade, MD; Center for Cryptologic History

IVIEWER: LICHTY, Jean; PETERSON, Mike; BURKE, Brad; HATCH, David A.

[Tape 1, Side 1]

Hatch: Before you start let me take a test of your... This is June 16, 1994. We're interviewing Mrs. Juanita Moody about her long career at NSA. Present are David Hatch, Jean Lichty, Mike Peterson, and Brad Burke. Please go ahead now.

Moody: Well, I was at college in western North Carolina. It was a small, coed school. The war was on. I was there from the time I got out of high school in (B% '35). In early 1943 our men were being drafted one after the other. Being a coed school all of a sudden there were practically no men left on the campus. I felt that it was wrong to be spending my time in this beautiful... clear blue skies, going around the campus and studying and going to classes at leisure when my country was in a war, so I went to the recruiting office in Charlotte, North Carolina, and volunteered and said, "I would like to do something for my country." And they asked me what I'd like, and I said, "Well, I'd like to get into intelligence work." Don't ask me how I knew to do that. I had no idea what... I didn't know what I was talking about. Anyway, by and by a letter came asking me to come and talk to the recruiting officer which I did. I took some tests. I can't remember now; they weren't much; maybe some kind of civil service test. And I was recruited, and I came to Arlington Hall in April 1943. They sent me to a school that they put people in while they were awaiting clearance. My clearance came through in 3 weeks time, because the man who later turned out to be a person in the Truman administration, (1G) [redacted] OGA [redacted] unbeknownst to me, but he came from my home county and so when they sent out a letter inquiring about me to that area, someone referred it to him, and he vouched for me. "Clean as a whistle," he said, and so they cleared me within 3 weeks. I was really kind of disappointed when I had to leave this classroom, because I was absolutely fascinated with the military cryptanalysis courses that they had. I was surrounded in this room by mostly people much older than I who had been recruited from the various campuses. They were professors and teachers. Being as young as I was and absolutely loving this cryptanalysis course, I dug in and went right

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through, I think it was, Cryptanalysis 2. I was through it, and they were looking around for something else to give me to do when someone came and said her clearance has come through. And they take me into one of the long halls at Arlington Hall, and I remember that it was kind of dark in this wing. People were packed in there like sardines. I saw one man with a sun visor on sitting at a table. I saw a lady with an ice pack on her head. I saw one guy walking around in his underwear.

Lichty: What time of the year was this?

Moody: It was in April. Another one was barefooted. There had been a rain storm or something and some of them had come in and were drying their shoes. I was given a very simple explanation. They said, "This is the German problem." (laughs) And they take me over to a man who said, "This is your job. There's a stack of cards here and there are these print... " No, he didn't say printout. "You take this sheet and you look at this card, and if the number matches, you put a check on this card and you put it in this box, and you put this sheet over in this stack. If it doesn't match, you put the card in a different stack and the sheet here." And there were some numbers that I was to match. That was the explanation and the indoctrination I got to my job. And I sat down and I started doing this and wondering what in the world was I doing. He gave me no chance to ask a question, and I'm looking around and, "What in the world?" My father had told me to come back home if it was something that I thought I wanted to back out of. That sort of went through my mind. So pretty soon a little man came creeping up to me and said in a soft voice, "Pardon me." And I remember he didn't have any shoes on, and later learned he was drying his shoes because he had been in the rain. He said, "Are you the girl that keeps the (B% Zahlentafel)?" "I don't know. What's Zahlentafel?" He said, "Well, it's a book." I said, "Well, I don't think that's me, but I'll see if I can find out." I didn't know a word of German; I knew just a little bit of French. So I go and ask, and ask, and ask. And finally I find that there was somebody who indeed had a book. And I said, "What is the book?" And he said, "It's a key. It's an additive that is applied to a code." And so I settled back down and started doing this job again, and another great, big, gruff guy, who turned out to be Sam (B% Scheiber) who was a professor from Amery [Emory?] University - quite a character, but I didn't know that - he comes up to me and he says, "Miss D," in great contrast. "Are you the lady that keeps the (B% Gradtafel)?" And I said, "Well, no, but I just found the one that keeps the Zahlentafel." And I said, "Incidentally, tell me what does Gradtafel and Zahlentafel mean? Do you know?" And he said, "Oh yes, I know German." And he said, "And I'm a linguist, and I sit over there." I was to learn that linguists sat in one place, and cryptanalysts sat in another, and clerks in another. Actually they weren't supposed to talk to each other. Anyway, that was my introduction to my job. It turned out later, I found out what I was doing was working on what was the German keyword problem, and we had the codebook, and we knew there was two additive books, and the keyword was an 8-letter word which you put through a little table to give you a conversion to the lines in the

additive book, and then those lines of the additive were one from... there were two different lines of additive, so there would be two additive lines. They were added to the code - it was a 5-digit code - to get the cipher, or vise versa, and we had solved it and reconstructed it. So we went on from there. I had nothing else to do, and so I started staying late and digging around to find out where these sheets of paper went, and then I found out they said this had to do with something called the hit table, and I found out what was happening was that the cryptanalysts were assuming certain beginnings to messages and looking them up in the code book and subtracting the code from the cipher and then taking that difference to this... what they call a hit table, which was a field telephone attached to what turned out to be IBM equipment downstairs - sorters and collators, and printers - that was the extent of it, and they could split for these combination of digits, and if they got a hit, and that's really what I was looking for to see if we'd found a match of the additive lines that would give the cryppie... and then if it was right; if he or she decided that you really had the right additive, then you'd turn it over to the linguist, and they did... well, the cryptanalyst had to turn this into code and text, and then you'd take it over and they'd translate it. But lots of times they just would have garbles and that sort of thing and come back and say could there be a mistake in this or that? In no time at all this supervisor went away, and I was very happy; in very short order, because I had become very nosy about this operation, they decided to put... I became head of the hit table; a big promotion. Well, I learned also that there was all of this plaintext, and that people came in in the wee hours when the intercept would be delivered, and they would sort all the plaintext out and put it in one pile, and all the cipher and put it in another. Then they did another sort on the cipher and they'd put everything that had the characteristics of this keyword system in a separate pile, and they took the other cipher and they just put it in a pile. I can't remember now; I think at one time they were throwing it away. I know GCHQ was. Anyway, I found that these people who were going around asking questions and needing help, I could learn from them, and I decided maybe I could help them too. So I talked to the various people. I rapidly discovered that I could go to that pile of plaintext that was thrown in the corner and find how to get beginnings to messages that... if out of a certain embassy I was trying to read a message, they might be talking about a subject in plaintext and go into cipher. The Germans were very careful about gradations of what they do, and they'd decide this text is... it's all right for it to go plain. This one can go cipher. I had a great memory as young people do, so I would just go every morning and I'd go looking through this plaintext, and I would look at text, and I didn't know what it meant, but I remembered what it looked like. Particularly I found that if I could see the beginning of a message, I came to know who would be signing the message on that subject, and so forth. One language person would come to me all the time and ask me for help, and I'd say try this, and I'd write it down. And he said, "Don't tell me you don't know German." I didn't know German, but I was cribbing. After a while I asked

questions about this other cipher, and they said nobody works on that. "We're not allowed to work on that because the British" - I think that's what they called them then; I can't remember if we had gotten around to calling them GCHQ - anyway, both governments had given up. "It's impossible and we don't want anybody wasting their time. You do not work on that." Well, there was a young man named Tom Wagner, and a young lady who had worked... we tended to work in partnerships because we had no computers and a lot of what we were doing depended on memory, because I would sit for hours and hours and make assumptions and then try to go back and remember streams of digits that I had encountered. This became much more important later on as we started trying to work on this other cipher. So I started asking around about this, and they said we weren't allowed to work on it. And I would talk at break time and so forth with these other two people in particular, and they had a lot of interest and curiosity about, "I just wonder why that is?" Because after a while I was taking the assumptions from the hit table that didn't work during the day and on my own time at night I'd go back and rework them and go and call them in, and I get success after people who were doing the job. I actually would just go and take the stuff that sitting there in a pile; I assumed it was going to be thrown away. This lead to some resentment because Doctors Marion Levig and General (1G) Walter, who smoked cigarettes with a holder and spoke German... the one young lady who worked with me knew some German. She had been to Middleburg College. When she would take a break and leave the room, these two would make a lot of noise in German back and forth. So I told her... we got to be pretty good friends, and I said, "I want you to help me with German." I went and checked out a German language spoken course that they were giving our GI's that were going to Germany, and I took it home and I would play these records, and I'm sure you'd think I was crazy. I would recite this stuff back in my empty apartment. And I told her what we were going to do. We're going to practice a conversation in German, and one day when one of the men gets up and leaves the room we're going to have this conversation about the one that left the room. And we did it. (laughs) This is terrible, but young people do things like that. But they were very furious because I was getting solutions to their rejects on a regular basis. In the morning they would come in and stuff that didn't get solved the day before would be there and, you know. So we had this conversation, and we knew this lady liked her martini's and that she went to the... what's the hotel downtown that's just been restored? The Willard. So I look over to Ruth and say, "She must be having a bad morning. I guess she was back at the Willard last night drinking those martini's, don't you think?" And she'd say... and we had this all practiced in German. So I got some new respect from... they didn't know. They couldn't understand it, because I was giving all these people just streams of German text that was working. I never spoke and did not know any German. The cipher that was not being worked, we decided if we were having success on the rejects from this problem, maybe we ought to try this one. So we decided - and Tom Wagner was the ring leader - to

work on our own after we had finished our... nobody could complain, we thought, if we did this after we did a day's work. So we started working a few hours at night, and pretty soon others joined us. And we found that there were some pads that were called - it was the first I'd ever heard the term "one-time pad" - that had been confiscated by an FBI man when some German had jumped ship, I believe, in the Panama Canal, and he threw... when they moved in on him, he threw these objects overboard, and the FBI man dived or got somebody to dive in, and he retrieved them. And so we would study those. I still have this magnifying glass. It's about this big. It's my kid blanket. I take it with me everywhere I go. Took it when I retired, and I have it at home. I thought I had lost it last winter; I almost went mad. I use it now in my antique jewelry business. So we decided that a machine generated it. We found that on several different pads, I mean pages from these pads of 48 groups of additive, that there appeared to be something that was obstructing the printing. So we finally constructed that it was a paper clip; that somehow, wherever what appeared to be this machine coming down stamping, a paper clip had gotten tangled up in it, and that helped us to derive at the beginning of what turned out to be how the key was generated. And we solved that one-time pad system. We solved it late in the war, but we ran into some very, very valuable information. The most important turned out to be the message that were being sent back from the German ambassador in Japan to Germany. He had quite a good intelligence network going in... a fantastic one in Japan, and he was sending the information that he was gathering back in this one-time pad system. Now, the pages in these pads had been generated by three different machines involving different wheel orders in each of the 48 positions and 17 different sets of these wheels. Evidently a set would be like in a rack or a box, and you could take it and slap it into the machine. It was an odometer type wheel order pattern, except that on your car your odometer has the fast wheel here; the next depends on here and so forth. These orders would be scrambled and there was a notch where they'd... in the dependency order for turnover, and of course as is true in your car when you go from zero to one, these drag... they hold and you get so many, and then this one turns, and then these, and so forth. But the digits around there, the 10 digits, were not unique 10 digits. They could be any combination of 10 different digits. We had no machines. I want to fall back just a little bit and say the reason I wanted this to be on record, because I hope somebody will take this story and pick it up and run with it and do something, because this story has never been properly documented, because both agencies were embarrassed at this.

Lichty: Both agencies? That being CIA and AFSA?

Moody: No. GCHQ. You will never have an admiral or anybody at GCHQ... one person did write this up, and you showed me that was Brigadier Tiltman. That was just the time when I was caught up in other things and didn't get around to it. But his is strictly a technical journal treatment of it, but I take my hat off to him. He was a very... he was the one person that would have done

it. And there were others that would have had they known the story, but there were a lot of them that weren't about to, because you know they've taken great credit for the ENIGMA. They like to talk about and write about the ENIGMA. And I'll get back to this in a little bit. We started getting more and more hopeful; again we had had to go back to being Cinderella all day, and at night we'd all turn into pumpkins. And our little group got bigger and bigger. And there was a lady, another strange lady from the German section who claimed to be a countess - I don't know if she was. She was married to a sergeant who worked in the office of our commanding officer. And he'd put out a little poop sheet every day, as military installations do, telling little things that were happening. She got working more and more and more interested in what we were doing, and we were sitting there making assumptions and stripping out would-be additive and trying to see if we could find anything with any characteristics; and trying to remember, "Did I see one yesterday or the day before? Did I see that group of additive or something close to it two days ago?" And to tell you the truth, I remembered like to go back looking at streams and streams of digits days back. "Oh, I saw that somewhere," you know. So anyway, she got to spending more and more time there, and I guess her husband asked her for an explanation, and she told him, "Well, we're working on some forbidden project. We work on it after we... " And so he came strolling in one night and wanted to know what we were doing, and we told him. And he put it in the poop sheet. She (nearly) died. He put it in the news. He said that there's a group of people that were on a problem that they're not supposed to... you know, has been given up. They're not supposed to be working on, but they've given their own time working, and they have no resources. And it also looks like they're making some progress. The next night, in comes the colonel, and he wants to know what is this? And there again, my one sense told me we ought to keep quiet and the other... but we all were of the same makeup that we just didn't believe that we shouldn't do this if we thought we could get somewhere. So we told him what we were doing, and the next day all kinds of people show up, and we started getting resources. We made rapid progress once things started to happen. They moved in lots of help. We rounded up all the mathematicians in the agency, and we actually reconstructed these 17 sets of sequences in these three machines and the wheel orders and started to generate the cyclometers, but we had to generate a group at a time. For a long time we'd have to try to place a message, and all we had was IBM equipment. They sent me home; about 3:00 or 4:00 o'clock in the morning someone comes and says, "Hey, go home." I never wanted to go home because it was so fascinating. I didn't require much sleep. "We're going to give you a new job in the morning. We're going to have a big task for you, so you must go home and get rested and come back at 8:00 o'clock." And at 8:00 o'clock in the morning I came back in, and they had organized... by then we had any brains that could be rounded up in the agency working on a crash basis, and there were people in and out, and they were organizing. I didn't know what was happening except I was still

trying to reconstruct... working along the lines of trying to get some of these would-be groups of key for these mathematicians and people to try to work on. So I found myself in charge of 125 people the next morning at 8:00 o'clock, scared to death, but not time to be scared, so here we go. Well, it turned out we found out that pages as they were generated were then shuffled and bound in pads and distributed to their various embassies, and the messages were enciphered from one page to another. Particularly, like these Tokyo messages would be great, long things like this, and there would be 6, 8, 10, 12, sometimes 15, 16 or 20 parts meaning that many pages from this key production had been used, and they would have been generated in different orders from any of the combinations that I told you about. So that the army intelligence, G2 people, sent two men who stood there at my desk and every time we would start to break out a part in a message... I mean, they were ordering and reordering priorities all day, because we would attempt... it might be part three that we would get into in a message, and if they could tell from that text that that looked more critical to them than some other text, they'd say, "Stop everything. Give priority to trying to get the next part and the next part." And here we'd go scrambling trying... and we produced racks and racks and racks of this key in little, narrow IBM printout bound cyclometers with labels. I remember how they would label them with crayons on the ends of the pads and stack them on the shelf, and we'd be grabbing 'em. Then they had called Alex Pringle who was a linguist and mathematician, a very bright man who had worked with me before he had gone to Bletchley. They called him back, and he and I were working together. And we got the idea of building... we got a hold of some of the people in the machine room and we built something... he called it the "Fachnergeraet." It comes from some fable.

Hatch: Yeah, "Fachner" was a hound, wasn't it? The hound of hell, or something like that?

Moody: I think, and it came from his childhood; stories that his... there were some like a childhood lullaby or something. So he said, "That's what we're going to name it." He was very boisterous. But we told them what we wanted, and they made us a machine that would... and we'd come, "If I could just get there and just generate while we're trying to reconstruct these additives and get an idea that I think I know how these sequences go, maybe we could generate a group of key right there on the spot with our own machine. So they took these slugs and welded them on these wheels and made this thing. It was a very clumsy thing; took up a lot of space. A lot of people thought we were... there was trouble. That thing would throw... would get going and then it would throw these slugs. We'd get hit in the head with the slugs, and then these little pieces of lead would be coming out. But it did... and I'm telling this for your benefit, because that was my first experience at trying to build a machine to suit the problem.

Lichty: What year was this?

Moody: 1944. Anyway, we ended up reconstructing the additive. I'm making it much

simpler than it was. Certainly enjoying a high priority, and these two G2 officers, they were never tiring, and I always remembered, and I thought back, and both these experiences made a great impression on me and had a lot to do with my career. The G2 men standing there, looking at the material as we were breaking it out and deciding on which was hotter than what was one. The other was the fact that we had dared question a decision and do something that... we continued to exploit that Tokyo circuit with all of our might right up until VJ Day. And I was told by these officers, and I wish I could remember their names. I heard later that one of them was so exhausted at the end of the war he came down with tuberculosis and that it killed him. But they told me that the invasion of Japan as planned was called off because of the information that we got out of this material. Now, on the other hand, the keyword system; they didn't distribute these pads to all posts. They couldn't get them to all posts. The keyword system continued to be used, and they became frantic and even improvised other measures there. They had an emergency kind of measure for using three streams of additives. And I assumed and had some luck that the stream of additives at hand from the last case, because they might encipher one with two additives here and then a more important one, again the Germans deciding that this was more strategic information, would do it with three; I assumed that that double additive right at hand, maybe they'll use that for one of the three. And I split it for... and was successful in getting into several of those. I never had to write that up. I got picked up and all, you know, into this GEE we called it, the one-time pad. This was written up by this Tom Wagner. He was the hero of this. In fact, he got a citation after the war from the Secretary of War due to the people in G2 having known that he was the person who was leading this effort and (2G). In addition to the fact that the two agencies had given up on this cipher, and I'm not going to call names, but I know that some agency executives, I guess you could call it, never really quite got over that because (B% it was a blow to) some people who were (1G). Additionally, Tom Wagner turned out to be a gay and was asked to leave the agency. That was his reward. And I turned out to be the person that was chosen to tell him that he must either volunteer to leave or... now, I had known ever since I met the man that he was gay. Fortunately in the beginning nobody had ever come around and told me that there was anything wrong with it, or I should go running off and tattle. But he never hid the fact either, so I always felt that there was clearly a case that the basis for this decision, however sound it might have been, certainly didn't apply in his case, because he didn't hid the fact that... so anyway.

Hatch: When about was this? 1944, '45?

Moody: Forty-four. We started getting into this late in... it would have been late in the picture from the German's side, but the information that we ended up exploiting, that Tokyo material. I don't know how long it would have taken us with the resources and techniques we had at hand to have exploited all of that material even if it had been the highest priority in the world. We were actually kind of sad to have to wrap it all up and get out of it, you know.

Anyway, that's my wartime experience. I decided to go back to my planned life. I had my life all planned, and so I... (cut off by Hatch)

Hatch: Was this after the war, or while the war was still going on, after you had finished this problem?

Moody: Well, it was after the war. We worked this... (cut off by Hatch)

Hatch: The problem died when... yeah, yeah, yeah, yeah, yeah, yeah.

Moody: ..day and night. We worked this day and night until VJ Day, and then they said we don't need it anymore, you know?

Hatch: Okay, okay. Right, right. There was no more traffic, I'm sure.

Moody: By then I had gotten out of all of the... I didn't have so many of these people around my neck, because they had decided that this Pringle and I should work on trying to clean up the rough spots, and so they brought him back, and he and I were working as a kind of a techniques team.

Hatch: Could I ask a housekeeping question or two? One thing that I don't think we ever asked you, and I probably ought to know. What was your name at that time?

Moody: Morris. Juanita Morris. Charlotte (B% Gerhard) just found out this year that my middle name was Louise, and she writes me little missals now and sends... but I had been Juanita Louise Morris and never liked that middle name. And when I got married in 1948 Uncle Willy Friedman never would call me Moody. As long as he lived, even if we would go to a cocktail party he would introduce my husband... but he sort of founded women's lib. "I knew her when she was a Morris. I'm never going to change that." And he'd call Warren, my husband, Warren Morris. It was his little joke, but he never would call me Moody.

Hatch: At Arlington Hall who did you report to on this problem? What was the chain of command?

Peterson: You said Tom Wagner was your supervisor?

Moody: No, Tom Wagner and I were just independent. I mean, we just... (cut off by Hatch)

Hatch: I don't want to put you on the... (cut off by Moody)

Moody: Tom had a grade or two on me rank wise, and so he was a kind of leader of our... this was strictly our own informal, unofficial doings. Tom was the leader. It was Tom, and Ruth, Jack and I that... we joined him in starting this effort and then... let me see. I'm trying to remember on the keyword problem there was someone named Paul (B% Defenbaugh) who was the one who told me to check the things on the cards. And then they brought a young lady named Peggy Brown in, and I reported to her. But then they moved her out and they kept moving people to the Japanese problem. I think Carl (B% Kritsky)... my bosses were changing every day, but Kullback was the head of the group that I was working for.

Lichty: Were these like a division or a branch?

Moody: Yes, I think they called it a branch in those days.

Hatch: Before the war a branch was higher than a division, I think.

Moody: Yeah. I think Kullback... I think Rowlett was in charge when we started getting into the GEEs, but there was several people between him and me, and they would march these captains and majors and people through, but they were sort of passing through. But Carl Kritsky was the first sort of anchor that I could anchor to that... but he was a German linguist, but they put him in charge of the... but I can't remember... and this again was changing. But I know Carl Kritsky was my immediate supervisor when the war ended, and Colonel Corderman gave his famous "Here's-your-hat-what's-your-hurry?" speech outside. He called everybody together out on the grounds at Arlington Hall and he said, "Congratulations and here's your hat. What's your hurry?" So as I say, I had my life planned, so I went to Carl Kritsky... I talked to my mother and I told her I was going to go ahead and do what she wished, which was to go back to school and continue, because they thought I knew what I was going to do, and I went in to tell Carl Kritsky that I plans that I intended to carry out. And Carl pleaded with me not to leave. "Well, I feel that I've got to go back," and my mother really wanted me to be the equivalent of a professor someday or something like that. And Carl said, "You know, Juanita, I have a Ph.D. from the University of Chicago, and I've never found myself trying to talk someone into not going on with whatever they had planned, but" he said, "you're making a big mistake. This is your cup of tea, and there are going to be other targets. There are going to be other... this effort is not going to stop today. This is just the beginning. And I just think you would be making a terrible mistake." Well, I had not up to then had any reason to believe that the agency wanted people to stick around. So I thought about it and decided, and so I went back and talked to him, and I said, "Well, I'll stay under the condition that... I have some thoughts and some ideas from the experience that we've had during the war, so we've got a little group of people called R&D. If you would let me go down there and have a sort of a sabbatical and pass on to them, and work with them some of the thoughts that I have," and he said, "It's done. You can have a year in R&D." And I went to R&D and started working with those people, and Hugh Erskine then was over Carl Kritsky, and they had started to figure out who the enemy was. Somebody had decided that Russia and the East European problem was important.

Hatch: Okay. Let me interrupt here. We're just about at the end of the tape. Let's switch the tape over. (TRNOTE: tape goes blank here)

[End of Tape 1, Side 1]

[Tape 1, Side 2]

Peterson: (cuts in) a trivia question. What was Arlington Hall like after the VE Day and the VJ Day? Were there celebrations going on, or did you go out for cokes,

or did you party, or just this was a workaday trying to clean up back business?" What was it like?

Moody: No. Let's see. The end of the German war didn't mean anything to us, because we were so... I mean, we knew that it had happened. We were happy, and some things didn't go on. But I was so involved in this because of the information we were producing relative to the Japanese war. I seem to remember it was hot as the devil and that we were shut up in this little room working all day, and we heard a rumor that was being spread throughout the building that they had read a message on the Japanese side that said the Japanese were surrendering. This rumor kept going around, and I must say it affected us psychologically. I have never been so affected by a rumor, although you had to conclude that two atom bombs had to bring them to their knees. But you don't know with all these stories of suicide. You don't know whether it would or not, as long as anybody was left around that could throw something at you. I left the office and went to the bus stop; no, I was going to go home. And when I got by the bus stop I still didn't know whether there was anything to this rumor. There were several people that I knew at work standing around the bus stop waiting for a bus. I walked home; it was a good little ways, but it didn't seem like anything then. And somebody stopped at the bus stop and said, "It's come out. The war is over." We went into the Buckingham Rio to see if we could confirm that it was true, and it was. So we all decided to go downtown and celebrate. So we all got on that bus and went downtown, and then Truman gave us a couple days off, and we took the days off! Because I couldn't work the next day. We celebrated all night. (laughter) But then Alex Pringle and I sat there with all these stacks of stuff, "and now what do we do? I mean, wouldn't it be nice if we could sort of write this up and really document it and (2-3G) ?" And he said, "No, that means we're through with this." And people just started leaving by droves. And that's why I say I decided... well, for one thing I was never going to see a lot of my friends again. Incidentally, this Wagner was not asked to leave the agency until sometime later. He was around for a while, but he still left in the forties; I'd say probably '48 or '49, because they had moved him around to try to do what he had done before in some other areas. But ultimately he came to work for me in another job that I did. But anyway, are we on a new tape now?

Hatch: We're on a new tape where you've just gone down to R&D for a year.

Peterson: And then the Soviet problem. Do you have a sense of who decided the Soviets were the next target? Did you have a feel they were friends or enemies?

Moody: I didn't know. No, in fact we just kind of wondered. Remember, I was a cryptanalyst. I wasn't really supposed to know or care. One thing that was beat into us is: your's is not to reason why,... you know. Cryptanalysts are not supposed to know about things like that. And I was so carried away with wanting to do something with these machines. I thought, "I want to go where people who know something about machines, and we want to... " And so I

started playing with a bunch of people down in... and there was a guy named Paul (B% Reimers), who worked in what later turned out to be an 03-kind of job, but Paul Reimers and I were happily working back and forth. Then I decided that I wanted... we got into building a machine called (B% MATTHEW). We were working on a 32x32 relay machine, so we could use digital and/or literal to see if it was different text. But Hugh Erskine... they decided somewhere by then... let's see; this would have been... I can't remember the exact time. We did some wrap-up work on the German problem. I guess it was in deep in the course... before I would have finished the year that I had asked for, that Hugh Erskine called me and said that he couldn't continue to allow me to work down there because they had gotten some priorities from problems that were going to be important, and that there was a problem called the Yugoslav problem that had to be done, and that they had decided they wanted me to be in charge of the Yugoslav problem. So I came back and got into that. I was in charge of the Yugoslav problem for a while while we were still army, and I was still in that problem... and it was a fascinating problem and enjoyed a relative high priority. I didn't know anything about the Russian problem; nobody told me it was... (B% speaking of) compartment... I knew something was going on, but I... (cut off by Hatch)

Hatch: You didn't know they had a Russian problem at the time then?

Moody: I assumed that these people that went off in this area that I couldn't go in that that's what it was.

Hatch: There were about 50 people in 1944 working the Russian problem.

Moody: But I'm talking now, 1946.

Hatch: Yeah, I know you're talking '45 and '46. Yeah. There wouldn't be any hundreds of people... (cut off by Moody)

Moody: And I would not have known... in '44 it never occurred to me to wonder. I could have, but I didn't even think about it. I didn't even wonder.

Hatch: Brad, do you want to ask anything about the R&D days and the machines?

Burke: No.

Moody: I'll get into this off and on all along the way anyway. So I had the Yugoslav problem up through the merger with the services. I was still... I guess they called it probably a section. But we didn't have and could not get Serbo Croatian linguists. It ended up that we were able to read the low-grade Yugoslav Army cipher, but they had a high-grade cipher that we couldn't read and a [redacted] And we ended up and it was for all intentional purposes maybe a one-time pad. I was possessed with not working... the one-time pads were not solved. But I had the problem of directing all of the cryptanalysis, trying to be a cryptanalyst, planning the buildup, getting linguists. And so I had one Serbo Croatian linguist, and she herself was a Serbo Croatian; a very temperamental person. I still keep in touch with her; in fact, I visited her in California last year. So I was able to talk her into

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teaching a language course, and I went to the school and asked them. They were having a terrible time figuring out things for people to do in the school. It was just make work. There was no real direction. These are my words; I may be wrong, but I think you'll find other people too. So I made this magnanimous offer; I said, "You know, I entertain your people in the school and give them something to do. Let's put them in this Serbo Croatian course." So they herded all these people in there, and then we had a lot of German linguists and people like that. I told her to be cruel. You know, the ones that don't have it, don't encourage them. We had an elimination. We'd keep so many and we'd work it down to a course where we had only the very best of the people left. And then I go to Hugh Erskine and say, "Hey, we've got to have these people." And so, "Just go rob a bunch of people." One of them was someone who was a fantastic cryptanalyst and linguist in the agency, (B% Alice Keogen), she was who later became (1G). There's never been a better crypto-linguist in the agency than she. Another was... it turned out to be... he was two or three different President's economic advisor, Charlie Schultz was one of them. Charlie came to me... we trained him and he was good. Charlie had one suit and one pair of shoes, but he came to work every day looking like he just stepped out of a band box. His suit was pressed; he on a crisp, white shirt. I think he might have had two ties, but I noticed right off... and he was super great. He was a German linguist and had known German, I think,... well, he had a German background. He picked up the Serbo Croatian real fast. We were able to teach him to be a cryppie, and just when he was getting to be really great, one day he came to my desk and he said, "Morris, I'm here to tell you I'm leaving. I'm going back and do some more school work." And so off he went in his little blue striped suit. And I forgot about it and never would have remembered, but one day Buffham said to me, "Saw an old friend of yours the other day at the Pentagon, Charlie Schultz. I've been seeing him... you know, he would come to a meeting in the Assistant Secretary of Defense office, and he had said to Buffham, "Is Juanita Morris still out at the agency?" Anyway, just another sideline story. But we had to train all of our linguists. And I even talked her into writing a book on the Serbo Croatian language. I had to just beat her over the head to do that. And I got some very good people to train as cryptanalysts, and we actually did read some of the one-time pads. We found that this page of additive which was being applied to a monome/dinome substitution. Hey, that's another story that I should tell you, the monome/dinome story. Everything I did during this sabbatical period was... I asked this little man named Dr. (B% Pettengill), who was cataloging the TICOM documents having to do with cryptology, to let me have access to them and study them. And I had the best time. I would go and sit and read all these stories that they had interrogated these Germans, or papers that they had written up, or anything they'd found, and I was just fascinated with this. And I remember where one German was describing the tremendous feeling that a cryptanalyst has when he finally succeeds in cracking a code or reading the first message in a series, and

thinking how true that is. But I ran across some papers that the Germans had found when they had overrun a cave that had been occupied by Tito's guerrillas during the war. And I went through them, and there was this fascinating thing where you converted literal text to digital text by putting it through a monome/dinome substitution. And I can still see that page and the little chart and remember my fascination with it. I remember going home and thinking this over and what that would do to statistics for a cryptanalyst. Okay, I just had that tucked in the back of my mind and then here comes somebody saying Yugoslav problem. And so I said, "Ah hah." And I didn't think anybody else... I never knew anybody else that ever saw that document. [redacted] spent... I told him about it some years later, and he spent the rest of his life trying to get back to it and find it, and he never did, and I never did. I never had the time; I never could get back to it. I don't know if it could be found, but he wanted to find that badly. [redacted]

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[redacted] I said, "Well, I saw it in a Tito guerrilla... some papers in a cave." So in the Yugoslav problem it turned out that was what they were doing. They were converting text and then applying it to this pad. We were able to make assumptions... well, we found a little bit of depth sometimes, so we got into... it turned out later it was not depth; it was the patterns in the key that we thought it was really found, and so we thought had the same underlying key. And they were just long streaks or sequences of the same digits, and then they'd go off in the "goopity gop." But we did that by differencing. I took this monome/dinome theory and started to think what would happen if you had that applied and you had the additive. So by then I had these machine people, and I asked them to make me a machine that I could difference the differences, and with those we started making inroads in the bits and pieces and getting this text and reconstructing the monome/dinome substitution. And we'd get these streams of additives, and eventually we found... and actually my assistant, whose name was Stanley (B% Coffin) - I don't know what ever happened to him; I think he's still working on the Yugoslav pad problem. He would never leave it! We finally decided we knew the dimensions of these pads, although as it later turned out there were several different dimensions, but what we were into, I think there were like... I believe it was 368... let's see; eight groups across. I think it ended up being like... well, I can't be sure. But they took the pad as it was printed out this way, and they'd use the whole pad through, and then they took it and turned it up like this and went this way. And then they did it this way. And then they did it this way. Okay, you try working [redacted] like that, and we had a lady named Edith (B% Squawza) who could actually sit and go back and forth and solve... cribbing in a digit at a time. She was a whiz at it. It was slow, but it was great. But it turned out when we started getting this key, these long stretches were repetitive, but then they would go off in the goopity gop. Now, that's another good one. I wish somebody would find out from the Yugoslav's how that key... so then I went to the agency and said I need somebody to study this key. In comes Tom Wagner, who was off

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somewhere - he might have been on the Russian problem for all I know. I can't even remember it because it didn't matter to me where anybody was; what I was doing. So they bring him back to work for me on this key study group; and Ruth Jack, and my friend Cecil Phillips. They brought him in to take a look at it. 'Til this day we don't know how it was generated. But in the meantime here comes the merger, and they tell you now we have to merge with the navy and the air force. The air force didn't really have any effort to speak of, but the navy had an effort. Prior to that the navy had asked me to come down and help them with theirs. They couldn't read any of that stuff. I told them all I knew about it, but they still couldn't get it. However there again, I don't know if I ought to tell this or not, (1G) got an official to go since the navy people at Nebraska Avenue had asked if I could come down and talk with them. Somebody had told them that maybe I could give them some help, and this pretty high official said to me, "I want you to go and tell the navy everything about your problem except what counts." In other words, he said don't help them. But I couldn't not help them, so I went and I told them. The problem was they weren't able to take what I told them and make it work. So I told them. I told them everything I knew, and they still weren't able to do anything with it. And so then when we had the merger they brought that problem over, and they took the guy who was in charge of that problem and put him over a group of problems, including me.

Peterson: By merger, you mean AFSA?

Moody: It was called AFSA, yeah. So the man who had the Yugoslav Navy problem was a civilian, and he had a bunch of navy officers working for him, and they were not reading any of the high-grade problem, and they wanted to read it, but weren't... so he in the course of the merger he outranked me, so they put the Yugoslav problem and what turned out to be East European countries in a string of boxes and made a little box up here, and put him in charge, and I was to report to him. And 3 days after... well, first of all, then all his people came to report to me. And there were three commanders that I picked up in this, and their names were Cox, (B% Socks), and (B% Knox). I was to work with them in getting all this stuff. They were reading the low-grade stuff on a regular basis. So they brought all the materials over, and I was going through it, and then I was making little boxes for people and telling various ones what their jobs would be, and here come these three commanders saying, "Well, we brought you everything." And I said, "Well, no you haven't. I want the product. I want all of your published product." For some reason I always wanted to see what came out of it. "And I want to see what you've been through." They go back and come back, "There isn't... we can't find it." I said, "Now, you've got to find it. I want you to go and come back. What did you do... ?" "Well, we don't know." I said, "Well, when you decoded one of these messages and wrote out the would-be product, where did you take it?" Well, they told me they took it to some machine place where people were supposed to send out product. And I said, "Well, go and tell them." In comes three, very red-faced people with these boxes, and that was the product, and it had never... for 18 months not one piece of

it had ever been published. It had been right where they'd... is this the kind of history you want me to tell you?

Hatch: Yeah, we want to document the bad as well as the good.

Peterson: Were they put on 5x8 cards or was it just the traffic that had been... (cut off by Moody)

Moody: No, it was like... what we did was put... we would translate a message and put it on a form. It was a sheet of paper, and they had the same, because I remember these sheets. I don't think they were cards. I don't think so. It didn't matter. Whatever it was was the format that was to go to what we came to call in NSA TCOMM, where our product would go. But I had always known that we were at their mercy, because we sent it... and you know, TCOMM had their own... you don't tell TCOMM what to do. They're in another world. You beg them, and we even had devised... we have ultimately over the years devised a priority system so hopefully TCOMM people would know that this message is a higher priority than this one, if you get into a time... What had happened to them in this place where they took their product to be published and distributed to the users, it never had gone anywhere.

Hatch: Yeah, as I understand it, AFSA at the beginning didn't control its own TCOMM and had no authority.

Moody: Well that's right. But this was even prior to AFSA. This was in Navy Security Group was it called then? Meaning that in their little... in whatever this room was they never got out any of this product, and I was able to determine that at least for 18 months. But I'll tell you something else, I didn't make any fuss over this because there were so many frictions, and the situation was so (B% tedious) that somebody would... I knew that I would lose more than I would gain for anybody if I made any to-do over this. And it wasn't going to change anything then anyway. So only these three officers and I knew that, and they were certainly very embarrassed, and one of them... I put in the machine room by then where we were doing it, and we had a lot of machine aids, and so I called it the machine room, and I fed him the information and I saw to it that he solved the Yugoslav Navy problem within 30 days. And he got into it one night, and when I came into work the next morning he made little tapes and put them all fluttering on his... and you know, I called the boss and said Lieutenant Commander Knox had gotten into the navy high-grade problem and so forth.

Lichty: Hearing a situation like that, I assume then that there wasn't much of a customer-user relationship between your people and, say, any other intelligence organization outside?

Moody: Well, there was with me, because I was working the G2 liaison officer, but it was mostly because I helped the navy with that relationship. But as far as being a user, mostly you did not. I did know Winkler and Morry (B% Kuhns), and Jack... who am I trying to think of who later went to places in the Pentagon?

Peterson: Weren't there special branch people working right with you? At least on the Soviet problem I learned that they were producing 5x8 cards of translations of decrypts, and then they'd put them in a box and the G2 analyst, which was really a customer, would come in and read this stuff and do whatever they did with it.

Moody: Well, we were publishing our stuff.

Peterson: You were publishing it with a serialization and all that?

Moody: Yeah, I was publishing the Yugoslav material. Absolutely. And I knew where mine was going, and I was working with people from... in particular from the army G2. I knew them and worked with them. But I'm telling you that I had nothing to do with this navy. I discovered that the navy had not in fact... it had not gone to a customer; had not been published. So, anyway. This will come into play later. So then Dr. (B% Gilray) was put in charge overall in our division. I guess he was the division chief, and he was from the navy, and Carl Kritsky, who had been my boss, became his deputy, and then this (B% Paul) (1G) was the branch over me as a section chief. But in pretty short order Dr. Ray asked me to move into the chief of the East European problem. First, I think, I took a job as being his overall - I think this was the order - his sort of cryptanalyst for the whole area and going around and trying to help the people in the other areas get their efforts going. And then he asked me to take this branch, which I did. I stayed in that effort until 1953, and in 1953 I was moved to the Soviet problem. At that time the Soviet problem [redacted] And then they started moving the agency to Fort Meade, and by then Dr. Tordella was the chief of 70; Dr. Ray was chief of 72, and I'm the chief of 724. But my organization and fragments of the rest of 72 got moved to Fort Meade, to the barracks, right in the middle of my trying to get a program going in this area. And on top of what was a busy time for me, something else had happened. Dr. Ray decided he had to have a rep to look over all of his effort at Fort Meade, and Dr. Tordella decided he did too, and they decided I should be Chief 724, Chief of 72 at Fort Meade, and Chief of 70 at Fort Meade. It seemed like that wouldn't be much to do, but it was a time when it turned out that that was a heck of a lot of (1G) to be there. But something we called the Traffic Processing Branch, a very nice army major was in charge of it, and they were in effect working as a service to my operation, was moved at the same time. So I set out to try to get... we were launching a major effort to go back and edit this traffic. It turned out that this traffic with the manual ciphers had been edited and reedited so many times that I couldn't even find a color of ink to use to edit the traffic, because different people... it would be poked up for traffic

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analysts who wanted it; one cryptanalyst wanted it this way, and one wanted it that way. So I launched a major effort then to start getting this (B% launched). Well, this lapseover... and I had a little trouble distinguishing how far we were onto this. I know I was trying to get the machine, which was to be known as DUTCHESS, a special built machine, and so I was running back and forth between Arlington Hall and here. I'm going to tell you another story which, I think, again is critical. So Frank Raven was in charge of 90. See, traffic analysis and, I believe, low-grade ciphers were put in something called 90 - we did some strange things with organizing a problem - and 70 was the high-grade cryptanalysis material.

Lichty: Can I ask a question? [redacted]

Moody: On the Soviet problem? (Yeah) I never actually worked on the [redacted] system. When they organized... I will tell you how we were organized as of the summer of '56. So I'll talk about the [redacted] when I get... I'm about to get there anyway. So anyway, the [redacted] system had evolved over the years. The Russians had started replacing their manual ciphers with machines. So they had this thing about, well you know, the people we've shipped out to Meade, we can't forget them. So lots of visitors came. That was a nuisance, because I couldn't work for visitors, plus I had to keep going back and keeping everybody informed of what was going on. One day they told me that General Erskine was coming out, and he was Assistant Secretary of Defense, and they were going to have this session at Fort Meade and that Mr. Raven was to represent - Mr. Raven was Chief of 90, wasn't he? okay - he would be there and that I was to represent 70 at this meeting, and this was a very high-level man, and everything really had to be done great. General Canine was on a trip and I think that Dr. Tordella was with him. A lot of people were with him on a trip which was, I think, one of the reasons why I was to be the person who ended up at the thing. So General Erskine comes out and we have these little briefings set up of what we're all doing, and he didn't pay much attention. In fact, he cut off the briefings pretty shortly and started firing questions, and he immediately zeroed in on me and started asking me all kinds of questions about... first my background experience in the problem, and then he dismissed the other people. We had various levels of security; you couldn't talk with certain people, and he said, "I assume you're familiar with the results of the Hoover Commission Report." I can't remember how I answered that question; I dodged it because I didn't know what in the hell he was talking about. And then he said, "Well, let me ask you a question, Mrs. Moody." By then I had told him what I would like to see done on this problem, where we would like to go and what we needed, and he said, "Let me ask you a question. You know the Soviet problem. You know about this [redacted] and the [redacted] on this problem. If you were given this: if the sky was the limit, and you could do anything you wanted to further our capability on the Soviet problem, in other words what I'm saying to you, given a free hand what would you do?" I was

scared to death; shaking in my boots. I looked at him, and I said, "General, don't talk to me about a free hand. I can't even get money for a little old million-dollar machine that I've been trying to get ever since I got moved to this problem." He said, "Is that right? You're having trouble?" He said, "Tell you what, young lady. I'll see you in my office Monday, and we'll see what we can do about it." And he walked out the door, and when he went around the corner I ordered up a car, and I took off. And when I got back to Arlington Hall there was nobody around but Ab [Abe?] Sinkov; well I think Bill Ray was there. I think I ran and told Bill. I think I called him and said I'm on my way. So we went to see Ab [Abe?], and by the time I got there they said, "We've had a call from General Erskine's office, and he wants you down there Monday afternoon at... " such-and-such a time, while I'm on the Parkway going down. So I told Ab about this, and he said, "Talking about a Hoover Commission Report?" And he said, "Given a free hand what would you do?" And so Ab got on the phone and started calling around, and yes, there was a study that the Hoover Commission had made at the direction of the Secretary of Defense, and yes, copies had come to NSA; they had gone to Plans and Policy. Frank Austin had filed them all; they were all in his file.

Hatch: The more things change, the more they remain the same!

Peterson: There's a scientific name for that. It's called mushroom management.

Moody: So Sinkov put me in a car; it's a Friday, getting ready to... this is my next weekend in, and says, "Go and get a copy." They ordered up a cleared driver so that I could read coming back to make every minute count. And I'm to read everything I can in this report as fast as I can. I smoked in those days, and I can tell you I had a pile of cigarette butts that just wouldn't quit in the back of that staff car when I got back with this report, and I'm going as fast as I can. But about all we could make of it was that the commission had decided that we, the United States Government, had to do something about the threat that the Soviet empire presented to us, and that everything that could be done to increase our ability to produce intelligence, vis-a-vis the National Security Agency, should be done, and steps should be taken to bring this about. So Monday afternoon I did go to see General Erskine, and he called in A.B. (B% Clarke), who a civilian who was there to... you know, he had money and stuff, and they promised me I'd get my million dollars - and we did - for the machine, but we went over all the... and then in the meantime within the next few days we were asked to produce a brief summary of what we, the National Security Agency, would do given a free hand. The powers that be decided that Arthur Levinson and I should draft something. You've talked to Arthur lately, haven't you?

Hatch: Oh yes.

Moody: Did he tell you about the free hand business ?

Hatch: I didn't talk to him. Tom talked to him.

Moody: So we were put to work. Arthur was then in... I can't remember now what we called it, but it would have been the... he was the number one analyst, highly

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respected technical person in PROD. So we hammered out a very brief rundown. He knew the details on the [redacted], and I as well, but I had a lot of like intercept and processing, editing and all that kind of thing to take into consideration. So we came up with just a... it was rough in retrospect. And by the summer of '56 we had a reorganization. In the meantime we had all these studies going on in the reorganization group, and I can't remember if this was known as the Corson Study, because, you know, we had Canine as the director, and he had done a lot of things to bring us up. He would bundle us off to executive development schools, and he had brought a lot of attention to our problems to the people in charge in the Secretary of Defense Office and had asked a private... an outside concern to study and listen, and we all poured our hearts out to these people, and then they came up with a proposed reorganization, and it was to take effect in 1956, I believe; it would have been like July, and that was when Canine announced that he was creating something called the Office of Advanced Studies and it was going to be the most erudite organization in the world. And then there was the Office of General Studies, and Arthur Levinson was put in charge of the Office of Advanced Studies; George (B% Begin) under him for the [redacted] and I had the manual problem, and (1G) was the other one.

Hatch: Yeah, you're virtually out of tape on us. (TRNOTE: tape goes blank here.)

[End of Tape 1, Side 2]

[Tape 2, Side 1]

Hatch: This is the second tape in the interview of Mrs. Juanita Moody. Present again are David Hatch, Jean Lichty, Brad Burke, and Mike Peterson.

Moody: I believe they brought in at that time into the agency simultaneous with implementation of the freehand program there was lots of money made available and lots of high-powered people came into the agency... (cut off by Hatch)

Hatch: Do you mean as a hiring program, or they transferred in from other agencies?

Moody: No, they brought people from private industry. I'm trying to think of the first deputy director. They brought a deputy director from... (cut off by Hatch)

Hatch: That was Mr. Engstrom, wasn't it? Or Mr. Ream?

Moody: Joe Ream, wasn't it? Ream and then Engstrom. But I believe that A.B. Clarke was in Defense all that time, and he was also a high-powered private one they brought in. It was specified that in the implementation phases of this that we would have someone with broad experience in private industry in the agency as the deputy director, and that's when they brought in Joe Ream and then after him Howard Engstrom. And our R&D people... all aspects of the agency that were involved in bringing this effort against the Soviet problem were involved. Arthur Levinson as the chief of ADVA, I've got to say that he did follow General Canine's instructions; he wanted him to

create an erudite atmosphere and that we were to be free thinkers, and he gave us a lot of autonomy, and he was just wonderful as the head of this effort. We worked for him as a group, and then as I was mentioning at break we agreed - Arthur and his crew - that we were going to give us a 5-year term, and we did, and we built what I have since always referred to as the backbone of the agency during the (B% interim), that is when we spent a lot of money behind... the computer was coming down the line then, but this gave it a hell of a boost. I already had had... while I was still in the 70 organization General Canine called me up one day and said, "Juanita, this is Ralph Canine. I just want to congratulate you. You are now the proud owner of a computer. What are you going to do with it?" I said, "I'll let you know, General." (laughter) I could tell you a lot of really wonderful stories about Canine. Anyway, I had this manual problem, and we did get our machine, and we launched a rather big effort, and we worked together as a team. But in addition to this big manual problem, I also inherited the [redacted] That turned out to be kind of a toy, and we used this problem... it was wonderful. It was a side that you could reckon with; you could sink your teeth in it. We played havoc with some of the [redacted] We didn't make a whole lot of... I don't know, should I get into the agency's... or should I keep it in broad terms?

Hatch: Yes. Whatever you think will tell the story the right way. This is a problem that probably has been adequately documented on paper, and what you can tell us would probably be what we know about it.

Moody: Yeah. You know, Dr. Tordella always said to me there are some stories never should be told, and I certainly think that some of the details here should always remain in that category, but I'll just brush with it, because it's important to other aspects of the overall SIGINT system. So we found that

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[redacted] So we set out to try to find a way... I worked with a lot of different R&D people trying to come up with some way to go after this. [redacted] One person in particular that I worked with for quite a while trying to develop - it seemed like forever - some capability was Arthur (B% Houseman). So I found out that somebody in R&D had gone off on his own and developed the spec's for a system, and when I looked at the

specifications, I decided it wouldn't work; and they had let a contract. And I said, "But we don't want it." And they said, "It's already done, and it's a contract, and we're stuck with it, so keep quiet and don't rock the boat. Besides, we've got plenty of money; why shouldn't we do this?" And I said, "I don't want it. I don't want that done on my watch. You didn't ask me, and I'm not going to do it that way." There was a feeling then that sometimes R&D people should go off on their own and do things without regard to requirements or our... particularly specifications. Again, I'm going to tell you one of these stories. So I'm not happy, because I've been told; you know, speak up. You're a big girl now. you've got some autonomy and do it. So these guys were rolling around and moaning and groaning and saying that I was spoiling... and to tell you the truth I honestly don't remember the names of the people involved, because we sent them packing before it was over. But I got a hold of Howard Engstrom; he happened to be talking to me and I said, you know... he said, "What can you do about the [redacted] problem?" I said, "We're working on that and haven't even gotten to the point that we know what we can do. I'm working with someone that I really think will, along with us as soon as we can get some specifications on this problem, come up with the answer, but," I said, "there's a contract in being that isn't going to do the job." And he said, "Well, what do you want to do about it?" And I said, "I want to cancel it." And he said, "Done." I remember him coming up to me at a cocktail party that night, and I think you know that Mr. Engstrom was also known for having cocktails, and he was going somewhere on a trip, and he said, "I just want to tell you before I left, and this afternoon I did that." But he also set aside money so that whenever we knew what we wanted to do we could. Okay, in the meantime I was working [redacted] About that time, our... (cut off by Hatch)

Hatch: [redacted]

Moody: I know, but I don't think we... you know, I'm a little worried about that, David. You think we should tell that story?

Hatch: It's up to you.

Moody: Well, okay. [redacted] (cut off by Lichty)

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Lichty: Excuse me. I think maybe we should... (TRNOTE: tape goes blank here)

Moody: (cuts in) [redacted] (laughs) This was the sort of thing I didn't tell anybody. Nobody but the engineer and I knew what happened. My only report back to my superiors was that, you know, mission accomplished. But I was trusted and enjoyed the role of working with these people, and the name of the game, of course, was to make sure that the need to know in every stage prevailed; that's a gold, old golden rule [redacted] (cut off by Hatch)

Hatch: Oh yes, the legendary... yes.

Moody: Yeah, I worked with [redacted] and I also worked with [redacted] Those were people that I knew.

Hatch: One question here if I might. One thing that Tom wanted to know was this: in our relationship with [redacted] it seems like things were fairly smooth relationship with them. Were they really? Was it a good working relationship?

Moody: They were in this area that we're speaking of now. I'm going to get to the other... the biggies. But in this particular area... and that's always true. When you have something your customer wants, and you hand it to him, he knows where you are and you know where he is, and you have what he wants, you've got good relations with your customer. The big problem we had in some areas were... this was not always the case. So I called up my contacts [redacted]

Hatch: Sure, sure, sure. We understand.

Moody: [redacted] So then Arthur (B% Houseman)... I may not have all of these exactly in sequential order, but it's during this period, he came to me and he says, "Hey, you know, I think we going to make some progress on this wideband receiver." I had gone and sat with the intercept operators in the field trying to show them what we were looking for. We put the best and the brightest kids at the intercept stations on these [redacted] you know. And he says, "Bing Crosby wants to record his programs so that he doesn't have to... " you know, for prime time we would call it now, "and so he's paid for the development of a video recorder to record it." And I believe he said, "Five million dollars he paid, and this is coming into being, and we could take advantage of that technology to go after this [redacted]" So we built a wideband intercept receiver system, and it was to be installed in Berlin, and by then Mr. Buffham was in Europe; he was our NSA EUROPE person. He thought it would be a great idea if I went and was there in Berlin when they tested this system, except that Dr. Tordella didn't think that I'd better go to Berlin. Buffham said, "I happen to know it's her birthday, and it would be a wonderful birthday present at that time." I didn't get to go. They let all kinds of people go, but they... (cut off by Lichty)

Lichty: Never let you go.

Moody: Not to Berlin. "It's too risky," he said. I suppose he was right. Anyway, the other thing we did was we worked on taking... what I try to do I find... here's a problem that's a small problem. It's got every aspect of the SIGINT problem from beginning to end and how you support your user. So let's make it that and use it. So I said, "Hey, we're going to take the signals that are coming in from the field and we're going to format them and receive them in here through our communications center directly into our computerized processing, and we wrote a computer program to actually solve one of the systems. I think it was the first time that... and now we want

to bring the signal in. And Cecil Phillips was to do this format. And I said, "Cecil, figure it out. How are we going to do it?" He came to me one day, and he says, "I've got the answer. What we're going to do is you can do it on" - what he called - "a tagging system," which turns out to be the predecessor to what we ended up doing with all kinds of things. So the first attempts were rough, and we had a lot of trouble... and a lot of people said, "Oh, you're crazy. You've got to get it into here and edit it and rework it and get other copies of the same intercept." But anyway, we did that. So I'm showing you how this little problem lent itself to this kind of an undertaking. Well, let me see, that problem was certainly the most live one of the whole undertaking that I had. We never did actually get very far with the big problem we had in that, although we determined that we had done everything we could... (cut off by Peterson?)

Peterson: This was the Soviet manual cipher system?

Moody: Yes, right. And besides it was more and more... (cut off by Peterson?)

Peterson:

Moody:

Peterson:

Moody: Yeah, so they were more and more [redacted] and I'm not going to undertake to speak for the [redacted] of it although I was being kept informed of what was happening there. So July 1961 we had a reorganization, and in that organization the agency had determined - or had it been determined for them - and here's where we're going to start into the Cuban thing... (cut off by Hatch)

Hatch: Before we get to the Cuban thing, can I ask another question about the Soviet problem? One of our other analysts had a question. I don't know if you feel free to talk about this or not, but can you tell us anything about the [redacted] in the late fifties and early sixties that you worked on with Ruth (B% Bibbs) ?

Moody: Well, Ruth (B% Bibbs) worked for me. This effort that I'm speaking of, she was working under my supervision, and she was in this effort. What were your years?

Hatch: Well, it just said the late fifties, early sixties.

Moody: Okay. Well, that was from '56 to '61. Ruth was one of those people in this [redacted] and I brought people in from... (cut off by Hatch)

Hatch: I see, okay. All right. That was this [redacted] Okay. I wasn't sure it was the same...

Moody: I don't remember that we called it that, but we [redacted] you know, I am not going to get into the details of the [redacted] and what we did and the efforts of that. Okay, now I think at this point having said that we had our agency reorganization in 1961, I want to fall back a few months with the events leading up to that reorganization and get into what came out of that.

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I think that during the years that we were developing - and we were busy doing this - the capability on the Soviet problem, and this was all gamuts of the Soviet problem; not just the high-grade, but also the (B% GENS) side and everything that went with it from collection to processing and so forth. We were busy developing all kinds of data processing capability and computer capability; the HARVEST complex being just one of the whole series of them. And I'm not going to try to get into all those because I hope that... although I fear for some of the records that we can't reconstruct because the people aren't here. I will mention somewhere along the line running into this problem briefly, I believe, during the Gaylor administration. But with the advent of Castro's announcing that he was a Communist and his cooperation with the Soviets, the community, of course, was very shaken. And the agency had not done very much anywhere except the Soviet problem. While we were busy doing this, I was aware but there was nothing I could do about it as much as I felt. In the development of the computer, it always worried me that we had great computerized capability just moving faster than you could imagine and that there was this whole, big medical world out there that needed it. At one point I thought as soon as I can get out of here I'm going to go volunteer to do something to help the medical world with computerized data processing. You just knew that was a problem, and yet everything we were doing was classified. And I knew it didn't have to be classified, but it was. So anyway, well, much the same with our technical capability. Here was this area of non-communist nations which had enjoyed a very low priority, and even with its low priority it had the benefit of the technology we had developed on the Soviet problem, and they could be doing a lot more with what they had, and I knew that, but it wasn't my... I couldn't cause that to happen. And I was busy with what I was doing and so forth. So when the Bay of Pigs failure happened the community became worried about what was going to happen, and Kennedy had made loud noises about doing something about Africa and... I mean, we not only as an intelligence community wanted to do something, but we, the U.S., always wanted to help all the underdeveloped people... we wanted them to have ice cream and television and refrigerators and things, even if they didn't want it. So we're going to do something about all this. So early... well, I'd say leading up to the approximate time of the Bay of Pigs, that effort was very sparse, and the whole area of Cuba was just nothing. I think I figured out one time there might have been the equivalent of two people on the problem at that point. Well, then all of a sudden it becomes a high priority and USIB starts rearranging its requirements and NSA decides that we're going to have to redistribute some of our resources, and we're going to have to get new resources, and things are going to happen, so here comes the reorganization. While working with the people who we had advising us on the reorganization of '61, I had had my opportunity to speak. I had been very distressed during the period of '56 to '61 that we didn't have one person charged specifically overall with the Russian problem. The chief of PROD never, for all kinds of reasons, he could not concern himself with

the specifics that I and some other people, but I know I in particular made the loud noises about it, and I tried every way to get people to work together, so I really zeroed in on this when I talked to these people. And I was prepared... it never occurred to me there was anything else in the world to do. I figured I'd be on that problem the rest of my days anyway, but I wanted to have one person I could go to who knew the whole problem. So sure enough, in the reorganization of '61 what had been my dream was coming true that there was going to be somebody in charge of all of the facets of the Russian problem, except that I was not to ever enjoy seeing this happen, because when they announced the reorganization, Herb Connelly became the chief of the entire problem, A Group, and he called me in immediately and talked to me and said, "I know this is something that you wanted somebody to be," and he told me why he would like me to do it. But I won't go into it. But he says, "I understand that you are going to be moved to another area, and whatever you want to do I want you to know this is my choice, but I also want you to know that they're probably going to give you a choice, but I want you to know that if you go to this other area, which will be"... what was to become (1G), "I will do everything I can, because you and I know that there's a lot that can be done with this knowledge, and you (B% think it over) (2-3G)." And I said, "Okay, we'll see what happens. Nobody has said anything to me yet." So then I was called up to the 9th floor and informed that... I didn't, you know, they always tell you you have a choice, but you know you don't. I believe it was the deputy director who told me that the director wanted me to be the person to go in and take over this... I think there's like 120 countries in all. I remember I stopped off on the way home that night and bought myself a map of Africa and South America and all of a sudden tried to learn what all the countries were. (TRNOTE: 3-4 words blocked by mumbling by Hatch) but Russia and Europe. So I went down to that area, and we moved... I had a good deal to say about choice of some people that knew various aspects of what had gone on as far as our technology in the areas.

Hatch: Did they give you any indication why they were switching you out of the problem you had been on - the Russian problem - most of your career?

Moody: Well, they said because the director had been told that we had to do a lot. We had to move very fast and put a lot of... they said resources, and I remember that Dr. Tordella said to me that if you agree to take this job, you're going to have the most interesting job in the agency for the next 5 years. It's going to be one fascinating place to be. He didn't tell me I was going to be the busiest person, but I think that's pretty obvious.

Lichty: Wasn't there also a time period there that the automation within that organization hadn't gone near as far as the... (cut off by Moody)

Moody: It hadn't gone anywhere. There was no such thing.

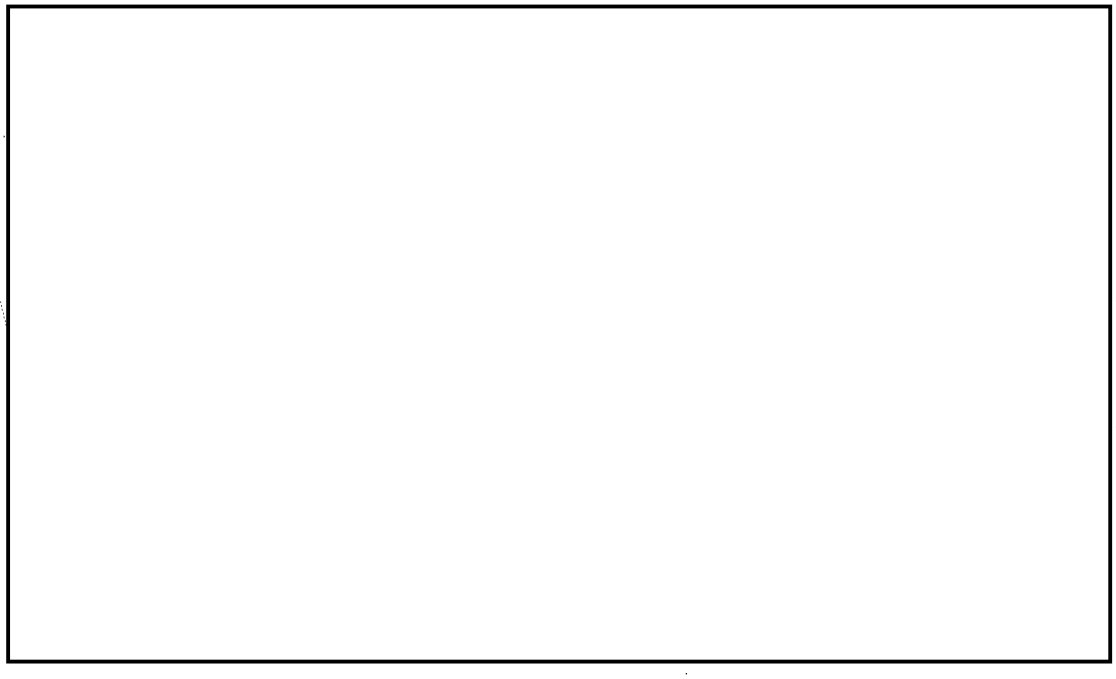
Lichty: Yeah, so that was another (B% aspect)... (cut off by Moody)

Moody: We had in the other area.

Lichty: (TRNOTE: Lichty continues)... volumes of material, and they could still have the (1G) capability to do all that automation (B% that was necessary).

Moody: So I went down there and in the whole area there probably weren't more than [redacted] people; I don't remember now. But they showed me all these resources that we were going to get. With the exception of the [redacted] which was being kind of directed out of the staff of P1 and whatever... it might have been called -3 or something then, there was no automation. The people were very devoted. There were a lot of really good people working in the area. I brought a lot of people as fast as possible from other elements of the agency and made contacts with all the other elements of the agency, and I immediately started having somebody from each... with that came the [redacted] I had one division for that, and then I had the Latin American Division; and I had the Middle East; and I had non-communist Southeast Asia. So I had a division chief for each of these and some sort of a staff. I tried to learn the names of the countries immediately, and that's changing all the time too. I asked somebody from each of these areas, each national problem, to come in and give me a rundown on the problem. I got somebody from the A Group area named Carrie (B% Berry) to come in, and I made a chart to cover all aspects of what the posture was for each country and had these people feed this information to her and make out a statement of all the different problems. You know, whether there was an army problem, and if so is there a low-grade and high-grade, and is it or isn't it readable, and if it is what kind of system is it. I had to keep that because there would be a flap here, a flap there; you'd be jumping. I was to take over on a Monday, and on Friday afternoon Captain Smith, who I was replacing, called me and he said, "Come on down and take over today. We've got a flap." It was Kuwait. And I said, "Hey," you know. I hardly knew who Kuwait was or where... besides I was thinking Latin America was the biggie, and I said, "No, I'm not taking over until Monday. My orders say Monday. You have it," but I said, "I'd like to come down and observe." And I did. It was quite an (B% awakening). So we set out to get... there was already some progress being made on trying to do something about getting the product out, because in the community, I think, it was known that our product was going down and laying in this TCOMM and just laying there, and it wasn't getting out on a priority basis. I immediately implemented something called "Show and Tell." Every morning first thing while I had my coffee in my office I would have somebody from each division come and show me the highlights of all the product they produced in the last 24 hours. I asked them also to tell me what was the date and time the intercept was made, and what was the date and time that the product got out of your hands. And it was a long lag time. So I said to them, "You people are doing a tremendous job producing beautiful history. You're not producing intelligence, and you've got to do something about... you know, we've got to shake up... " One thing we did was decide if the peak time of intercept coming in here from the Middle East is 3 o'clock in the afternoon, that's when you people that work the Middle East problem are

coming to work. Your main workforce is going to be here at the peak time of the day of your problem, not your day. So, if necessary we'll have a token force. We didn't have enough people to spread around the clock, so we did that. We put in our own communications system right around the corner, what we call a FLEXIWRITER effort, which became operational in early fall. There we had the capability to decide which piece of product went first if that decision had to be made. Hopefully we were building enough capability and we could have everything that needed to be going out on these various equipments, and we were just going out direct through TCOMM. This had been a long, hard battle getting this. Got that effort started. After I got this posture on all these problems, I sat down and said, "Now, I've got the machine people in, and we're going to put every one of these readable systems on computer. We're going to do it by computer." And we started just as fast as we could loading every one of these systems from all these countries, but we had to have a priority one. And sometime, I think it was like... I wish I could remember the date, but it's probably... things were moving fast. We got all of our main systems on the computer, and I didn't have my... you know, you can't have your cake and eat it too. People were all off; it was a Saturday, and they had a power failure in the building. And we had the darnedest scramble. I got a call from Carrie Berry saying come in. "We've got to do something." We had to haul people back because here we were! Well, of course, we got the bugs out of that eventually, but these things (B% were all)... in the meantime, things kept getting hotter and hotter. We were having a crisis in the Middle East and here we go. Sometimes Africa would act up. You were always being called in. My office and my desk was it. Whatever happened would... I started staying later and later and going down that parkway all hours at night. One evening an analyst from the Latin American Division comes to me; it's late and she says, "Mrs. Moody,



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responsibility, will you let it pass through to... ?" "Yes, what's your name, rank and serial number?" So I did, and we sent it. And the next day, although I was too busy to listen, but I was told he was elegant as only Adlai Stevenson could be. He got up; they awakened him, and he sat down and read this and [redacted] and get it all... and he sent a message back to NSA through State Ops Center and said that he wanted everyone that had anything to do with the decision to get that item up to him and get him up that night to have his personal... he wished he could personally thank them. He meant everyone including the person that typed it up. That's the way he put it. And I took it in to the little girl in the Flexowriter Room who had poked the message up, and she wept she was so happy. There again, you want your people to know what's... So that made some difference down in the State Department. I didn't have to argue too hard after that when I would... you know.

Lichty: Did they shake your hand?

Moody: I don't know. Again, I was too busy. So in the meantime, after the Bay of Pigs the Cubans started increasing their security. First of all, more communications came on the air. They started tightening up on their security. [redacted] The military targets had been relatively unsophisticated, but then they started tightening up on them, and they introduced a microwave system island wide, all the way across the island. So we started augmenting our intercept facilities at [redacted] in [redacted] as well as [redacted] and Vint Hill, because we were interested... you know, we were seeing a lot of activity in international commercial too that came to bear on this problem. We knew when this microwave system came out that we were going to have to be in line-of-sight to go after it, and we had been very busy doing site surveys. We went down to several islands around Cuba trying to get a line on their communications and develop what kind of communications were there and what kind of problems we would have with this. We also had quick like - for the whole, what was then this group of problems - decided to equip three ships: the Oxford, Liberty, and Belmont. The idea was to use them for search and development in determining on a search and development basis what kind of communications we were up against in the Middle East, on the one hand, Africa, and Latin America. These were program... and we were doing these intercept site surveys, and in the meantime I had continued my "Show and Tell" and it was getting hotter and hotter. And I had never seen or heard so much product and so many good things. But more and more I was hearing about Cuba and things that were happening in Cuba each morning when these people would come in. So in November of '61, on - I think it was a Friday; it was the last day before a 3-day weekend, and I can never remember... I wish I had a '61 calendar, because I'm wasting much time trying to figure that out - Dr. Tordella called me and said, "I have the Assistant to President Kennedy for Latin American Affairs, Dick Goodwin, and Assistant Secretary of Defense for Intelligence, General Lansdale, in my office, and they want to talk with you, so we'll come down to

your office." He said, "Chase everybody out and give us a place to talk." And he came down, and I chased them out of my office, and he said, "This isn't good enough." My thumbs were always going... well, so we went into a little conference room next door, and he closed the door and drew the blinds and all that stuff. Then they start talking, and Lansdale said, "Well, we're here... we want to know what you know about Cuba. What's happening in Cuba. And I mean everything on anything you know." And he says, "Juanita, even if it's a hunch, or a thought, or a guess, I want to know everything that's on your mind when you think Cuba." And I started talking. He said, "Now, come on. I'm... " I said, "I don't have to have any hunches. I've got enough on my mind that I'm seeing in SIGINT." And I started telling him what we were seeing. I said, "First of all, I moved over from the Soviet problem to this problem, and [redacted] I mean, they had to be doing that, I'd say, on an emergency basis. And then we're seeing all this increased shipping, and we we're seeing all these Russian technicians moving in there, and they're sending money; they're paying these people. And every time they send a payroll, we pick it up and there it is. There are big things happening," I said. "There is a lot of activity. There's a lot of Russian activity. I'd say something big is... " And I dealt in more detail then than I'm prepared to do now, because I simply have forgotten, because this was just the beginning of what was going to be a lot of things. So as I talked to him, he said, "Have you pulled all this together and written it up and wrapped it up in a report?" And I said, "No, sir." And he said, "Well, why not?" And my deputy director said, "God damn it," what's his name "Lansdale;" he called his first name. "We haven't... we're not allowed to do that. That's out of our charter. That's the community's job. That's CIA's job." He said, "That's intelligence. We don't produce intelligence. They're supposed to do this finished... " And he said, "There's no reason why... " And they started, you know, "Why not? Why not?" And he said, "Well, we just can't do it." And he said, "Could you do it if you were allowed to do it?" And I said, "Well, of course!" And they left. And a few minutes later Dr. Tordella called me back and said, "Well, you've got yourself a job. You're going to get all this together." I had read product that I had seen coming out of the A and the other area too, so I had a pretty good... because I made a point to see if I could find anything else to go along with it. So I said, "Well, call the other areas. I don't have any control," and he said, "Oh, they'll do it if you call them and tell them." So I called the chiefs; I think it would have been Herb Connelly, and would have been Larry (B% Sheehan), and said, "I'd like for your analysts to work with mine. I've been asked to do a special little summary for the Assistant Secretary of Defense, and I've got to have it ready by the end of the 3-day weekend." Said, "Fine." So people started coming and bringing like wheelbarrow loads of materials, and we worked at it for 3 days. And I must tell you that the first day I kept wondering why did I say anything? How did I get myself into this? By the end of the second day

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we were starting to be able to reduce this mass of material to something that was meaningful. And by the end of the next day I was feeling pretty good about it, and so I went home, and I left them typing the last pages of it. And I had written a note to all of my superiors; I think I had maybe four then. I was writing B... what did they call it? G? No. I think the Southeast Asian thing was split with us, and it was called a superstructure (1G). It never did get anywhere, but I was trying to think; I think Frank Raven was in this job, and they moved him out or something. Anyway, he never got involved in this part of this thing. He was not around. But I wrote a note to all of them in PROD, and the deputy director, and the director, and said, "Here's a copy of this that Dr. 'T' wants to be passed to... " And so I went home to get a little sleep, and when I came in each of them had read the thing. I guess somebody had told them it was going to be there, and they must have come in a little early, and each one called and left a message for me to come to their office immediately. So what would you do? Where would you go?

Hatch: Straight up the chain, I guess.

Moody: No, I didn't.

Lichty: Have them all come to you.

Moody: I went to the top. Again, you've got to make a decision. If four people in the chain of command want you to do something immediately, and I've got to go and say I'm sorry, then I'd have to work my way down explaining and apologizing. To tell you the truth, I didn't feel too apologetic about anything having worked day and night for 3 days. So anyway, I remember that the director was Admiral Frost, and he commended me and asked me how... and I told him what a horrendous effort it had been and what we'd done. And he said, "Well, it was certainly an impressive report. However," he said, "this will get us into terrible trouble." And he was absolutely worried. And I went next door to Dr. "T" and he said, "Well, it's an impressive package, but it's going to get us in a lot of trouble." So he says, "I'll tell you what I'm going to do. I'm going to send it to Ed Lansdale 'Eyes Only'." I said, "Let's publish it." And he said, "Oh no." I said, "Why not?" And the term we used then was "serialize." "I want to serialize it and publish it." I said, "There isn't anything in it except SIGINT." So he sent it down to them, to Lansdale, and later the copy came back, and there had been a note from Dr. Tordella to General Lansdale that said, "Mrs. Juanita Moody put this informal report together as per your request," which I thought was kind of interesting. And he sent it to Goodwin, and Goodwin bucked it into the President and wrote a little note telling the President about the meeting that he and Lansdale had had with me and a little summary. And he said, "She was complaining about resources, but then all government people complain about lack of resources." Then JFK had read and initialed it, and they sent it to me to file. So I told my troops, "Keep this updated. If you get anything significant to add to it, do it immediately and tell me. If not, update it every few days, and as you update it, I'll keep in touch." They kept upgrading it and bringing it to me. I kept going up and saying, "This stuff must be published." This is early

November 1961. In February 1962 I was really getting scared because things were getting so... there was so much evidence that things were... it was just piling up. And so I went again as I had done many times and said, "Look, let's publish this. I still don't see any indication that anything like this is coming out of anywhere else." And Dr. "T"... and I mentioned - I'll tell you too - I felt like if that situation was as bad as I thought it was, that we should go ahead and do this rather than try to mend what wasn't happening. So he said again, "We can't do that. It will get us in trouble because it would be considered to be outside of our charter." And I said, "Well, I'll tell you one thing. It has reached the point that I am more worried about the trouble we're going to get in having not published it, because some day we're going to have to answer for this, and if we do... " And so we went with the publication in February of '62.

Hatch: Yeah, 4 months after it had originally been written.

Moody: Yeah, and serialized it and sent it downtown.

Lichty: There were individual items that went out on a routine basis.

Moody: Every one of them had gone out as an individual item. There was nothing in it that hadn't been published as an individual item.

Peterson: Any explanation for why the other places were not... (cut off by Moody)

Moody: No. I didn't get... I think I'll continue talking about this document for just a minute, and then I need to back up and say what was happening operationally during this. Sometime after this publication... in the meantime I was encouraging my people to go ahead. I mean, if you can add two and two and come up with four, let's do it. So we started creeping up on the situation. I told (1G) Young, "Don't send out a report every time you see, you know, one carton of something coming off a ship, and another here, and another... add it up, and I'll go ahead and take the heat, because I'll claim we don't have the resources to put out a... compilate every little onesie, twosie, you know." You can't get it out the door if you do it that way. So a friend of mine OGA showed up and darkened my door. I had not seen him for a long time. And I said, what are you doing? What brings you here?" And he said, "Well, I came especially to see you. I have two things to say to you, and I felt like I wanted to come and tell you personally." And I said, "What is that?" He said, "One, I want to congratulate you. The word is around. Everybody knows that you were responsible for getting that serialized report on what's happening in Cuba out, and I want you to know that was a good thing you did." He said, "The other thing I want you to know is, no matter how good a job it was, it's never going to get a medal for you. As a matter of fact, there was a very high-level meeting called," I think he said the director called a meeting; it was directorate level, "at CIA in which the problem was to decide what to do to NSA for overstepping their bounds. We've got to bring NSA down to size. Look what they have done." And he

said, "Everybody was telling what ought to be done." You know, what they were going to be... everything from USIB was going to admonish the director, or they were going to... they didn't know just... trying to decide what to do about it. And he said, "And I just sat there and listened, and I had seen the report. In fact, I had been studying the report, and so the director," or the acting director - I can't be sure which one it was - said, [redacted] how come you're so quiet. You haven't said a word.'" And he said, "Well, evidently I'm missing something. I must not be on distribution for our reporting these days or something, because I have not seen this information put together by anybody in our organization, so could I have a copy of it, wherever it is?" And he looks around, and nobody says anything. He said, "So I don't understand what the problem with NSA is. As a matter of fact, I think NSA is to be congratulated for putting this out. But I sure think there's something missing around here, or maybe I'm the one that's not in on what's going on." And that was the end of the meeting. It broke up and you never heard any more about it. Now, when we get to the point where we're talking about their declassified documents on the Cuban crisis, we might want to tie back into this on another item, but I think now I want to get on with the Cuba problem. So then I would say by... we made great strides in the whole area with this automation of processing; getting our product out of the building and to our user under the control of the operating official and not somebody in a communications organization. And they kept urging me to make a visit to [redacted] and so in January of '62 at the urging of my superiors, because [redacted] When I walked in to visit [redacted] We had several series of talks. I can't remember; we got together two or three times, but I remember [redacted]

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[redacted] And of course, you can appreciate that. [redacted] Up until then we hadn't had in the old predecessor to my organization, there had not been much [redacted] It didn't matter too much, [redacted] I tell you this to let you know again, I think, the degree to which we were able to speed up our processing and the delivery of our product in a relatively short period of time; we had the know-how; it was a matter of getting the equipment, the priorities and moving out with it. We moved very fast with all this. On the microwave side of it, this became more and more a problem in Cuba. They were just moving at a great stride with volumes of microwave, and we had done by then site surveys. We determined that the microwave system was an RCA system that had a provision for Stromberg-Carlson crystal equipment, which could make for a tough proposition when it came to deciphering or descrambling this material. But in our efforts to intercept this we determined that they were operating the system wide open, and they never did get around to... and, of course, since that time period - I wouldn't know what they're doing today - but they didn't get around to ever getting to the next stage I'm sure that it would have been. So by then we started... I'd say by early '62 we were intercepting a limited amount of the microwave. By the early summer of '62 we had augmented our resources in [redacted] Vint Hill; put in collection facilities in Homestead; brought in the ACRP intercept capability, and the Oxford, the ship had started operating. We had a mighty effort on bringing the tapes from the intercept back into NSA, and Bob Hermann, as I remember, was the person I was working with on this. They were using this system; they had UHF and VHF single and multichannel printer and voice. There was some... and we had a (B% mighty) language capability. By early summer we also had... I had gone... in these what-can-we-do meetings, said, "Well, what we can do is use confidentially cleared personnel." Personnel people, of all people, said that, you know, she's going to violate security. I said, "No. We can do this in such a way as to use these linguists while they're being cleared, and we can go to the services." And we did. We went to the services, and we developed one pool of service personnel who knew Spanish and/or Puerto Rican languages, because we had the Brazil problem. A lot of the Brazil communications contributed a lot of information relative to the Cuban situation, and of course it was in Portuguese. So we started bringing in civilian linguists. We called the military language pool... and we'd pick up new recruits in the military who knew either of the languages, and we called that MEDICO, and we called the civilian hiring and processing capability (B% REMEDIO). And the idea was that we would bring these people in and while they were being screened and cleared we could be using them for what turned out to be... we were developing a capability based on the [redacted]

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[redacted] And as we refined this process down, we used our more highly cleared people. We fine tuned as we went, a la processing and clearances. By the summer of '62 we, with a filter process that Hermann came up with... and we're bringing this stuff in, incidentally, direct, like from the ship that's sitting there and some of the intercept capability at [redacted] the line-of-sight.

Hatch: Yeah. How was it taken from there? How was it obtained from the ship?

Moody: Well, they were just sitting there taking it on a line-of-sight basis and typing it in to our communications people.

Peterson: Voice grade channels. They put voice in channels and printer... (cut off by Moody)

Moody: Yeah. We put communications... we just piped it in.

Hatch: Okay. They weren't reporting it in... (cut off by Moody)

Moody: But we also gave them a limited capability for readout and processing on the ship on specified... especially for tactical communications and that kind of thing.

Hatch: So they recorded it too.

Moody: So, with this filter process, by early summer we could process this take at 16 times the intercept speed, and then we were able to double it up taking four signals, two at a time. So we ended up by... about the time of the crisis we were coming into full capability which was a rate of 64 times the speed. The other thing is, [redacted] It was that timely. So that is what we did with the microwave. The missile crisis itself... I was not cleared for [redacted] or anything that had to do with it until they found the offensive weapon... or they had an indication there might be and wanted to go out with a flight on the 14th. I was briefed on the October 14th flight ahead of time. That was after they had decided that people who had a need to know in the community ought to know. It was a Sunday morning, October the 14th, a most beautiful day, and I went out and got into my old convertible at the precise moment I had been told this pilot was going to get into his plane. And we were worried about this pilot by then, because we knew they had the same capability. Bill Ray was my boss, but he was in very bad health, and Ray had briefed me; he called me aside and said, "We think there are offensive weapons in Cuba." It had gotten to be a joke, the offensive-defensive thing. There were all kinds of jokes about what's offensive and what's defensive anyway. The other thing is, as things were really getting whooped up, here comes to my office - not a significant (B% time) - Walter Deeley, who was working for A Group. Walter had been working behind closed doors in one of the compartments; I hadn't seen much of him even though I had been in (B% the area). But Walter came to me and said, "I've been talking to Herb, and Herb said to come and talk to you. I wonder if we can bring the Soviet product over to you to get it out, because we don't have a way to get our product out, and, you know, it sits

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around down in TCOMM." Now how do you like that? So I said, "Fine!" He said, "Herb said to give you the resources. We would make up to you in resources how you (1G)." I said, "Well, sure." So they bring it over, and so we took the responsibility to send the Soviet product out too. So that was how we were getting our product out the door for both areas during the crisis.

Lichty: What was your first indication from a SIGINT standpoint of the missile crisis situation, that it was offensive as opposed to defensive?

Moody: I don't know. I don't guess I thought in those terms. I think I was ignorant in the worst. I mean, I was guessing that they were going to get away with what they could. But I had no way of knowing. First of all, I wasn't the kind of analyst who could analyze that kind of information. I had no access to

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I think I know what the

I personally think it was earlier, because I think I thought when I was talking in November to General Lansdale I felt that from all these technicians that were moving around in Cuba that something like that was happening. So that would be my guess 'til this day. I think we need a break. (TRNOTE: tape goes blank here.)

Moody: Okay, well here I want to back up just a little bit. As things were coming down on us, and I've been talking about the capabilities we were building in the summer and fall of '62, I want to talk also about the limitations. As our commands were being alerted, and military resources were being moved, and intercept collection resources and our own workforce was being augmented, and we had improved our capability to process materials and move them at a faster rate and get our product out at a faster rate, there were many deficiencies in our communications. Many times in the height of the Cuban crisis people had to call me. Some of the commands... I had many generals and admirals call me up on the outside line. Sometimes we'd have to hold the line open. They would even come by my office, and we'd make up little codes so that if this person wanted to call me to see if I had something or knew something there had to be some way we could double talk enough to get information. We didn't have secure communications between many of these people that were involved particularly in the commands. And the other thing was, my telephone and my office was it. In the days leading up to this crisis I would stay later and later, and more and more people in the community in the downtown agencies and the commands would find that they could call and get information or call and talk about what was or wasn't available. I would stay later and later. I had my workforce, as I had mentioned before, in this area coming in at peak times of work loads but, where necessary, spread out over the 24-hour day,

and that included the people in this Flexowriter Room getting the product out. I kept somebody there at all times. One of the people who worked in this Flexowriter program - he was a supervisor - was a Black clerk from the Washington area; I'll never forget his name, Oliver (B% Mowrey), a very fine man, who came into my office one night when I was working late and the phone kept ringing, and I would try to get out, and he says, "Mrs. Moody, I will bring a cot in and sleep in your office to answer your phone so you can go home, and I'll call you if you have to come back. I can see you're getting less and less sleep." So we did that. Now, ladies and gentlemen, that was a National Security Agency Operations Center, someone sleeping on a cot in my office so I could get a few hours of sleep. This is just in days leading up to the discovery of the missiles in Cuba. The Cubans came up as we had known and had alerted... we had actually sent a message out. I remember standing in the floor and having five people writing to send instructions to all of our collector facilities what to do if they did come up with an air defense communications system. And on October 9th they came up with one, and by the 15th we solved it. It was based on the Russian grid system. We were right on; we just jumped right on this and that was it. It was either Friday or Saturday before the October 14th flight I was alerted that this was going to take place, having now been cleared for such information. After that I didn't go home for days at a time. We didn't have any facility for anybody to rest in the building. Somebody suggested at one point maybe you ought to go down to the medical facility and have a nap, but there were so many pregnant women down there that needed the beds that I gave that one up. But General Davis was a veteran on the post, and he was the Director of PROD, and he offered a room for such times. What I would do usually is go over there sometime in the wee hours of the morning and have a couple hours sleep and get a shower. And incidentally, General Davis would make my breakfast because his own help was not up and about when I would have to come back to the building for the meeting with my people to brief our director, General Blake, who then would go down to the EXCOM meeting, which he did every day, and then he would come back and brief us - us being all the people that had anything to do with this crisis - up in the Director's Conference Room. He would brief us on information that had to do with us; anything that we had the need to know was happening, and then he would stand there and task me with all these things that should be done, and I would go back to my office. General Blake had a wonderful sense of the chain of command, and many, many people from all over the agency came in and volunteered. They came from everywhere. There were thousands of people by then working in the agency. Once Blake had given me the task of what I was to do, you know, that was my job, but of the volunteers who showed up in my office at night to help in any way they could, he was one of them. I can remember one night when our director, General Blake, came in (and said), "What can I do?" And I said, "You can call these people in. I need them." I remember hearing him out of one corner of one of my ears getting someone up out of their bed and saying, "This is Gordon

Blake. I'm calling for Juanita Moody. She wonders if you can come in. They need you." Maybe some message in a certain language that this person could handle. Not only was that what the director did, but all kinds of people from all over the agency; it was really a good show, a fantastic show. I think we did a good job. During this period over and over I saw items that I felt the people downtown in the decision making arena could use if I had any way to get it to them. I felt, and I kept saying... I said this to our own agency officials, "It's so sad that I see information that I think might be helpful if we could move it direct right away." But it was pretty cumbersome, you know, comparative to now... the community a was cumbersomely put together thing, although I think and I agree with Mr. McCone's wrap-up in that CIA document that the community did well with what they had.

Hatch: It's time to change tapes. (TRNOTE: Tape goes blank here.)

[End of Tape 2, Side 2?]

[Tape 3, Side 1?]

Hatch: I believe we're moving once again.

Moody: I've got to admit that I'm tired, but I think we can carry on.

Hatch: Well, I don't want to press you.

Moody: No, that's all right. I just wonder if I'm thinking quite as... (cut off by Hatch)

Hatch: Could I ask you a question? This may be a lengthy question. It'll give you a chance to rest your voice a moment.

Moody: Okay. Actually, when you... you'd better transcribe... (TRNOTE: tape goes blank here).

Hatch: (cuts in) During the CIA public symposium on the Cuban Missile Crisis held on the 30th anniversary, a gentleman got up and told the story about General Blake. He said that there was a Soviet flight from Moscow to Havana via Conakry, I think, in Africa, and Robert Kennedy wanted to shoot it down. According to this anecdote, Gordon Blake prevented them from doing so because there was not sufficient SIGINT on it. It looked like a suspicious flight. It eventually turned out to be the first scheduled Soviet commercial flight between Moscow and Havana. But according to this anecdote it was Gordon Blake's personal intervention that kept the orders from being sent to shoot this thing down. Do you have any information about this? Do you know if this is a fact, or is this simply a legend or... ?

Moody: I don't. I don't remember... I believe I would remember if he had told me this, but with the way things were moving we didn't always get back to... although I must say, I certainly had very close contact with Gordon Blake. When he was either downtown or in the building I was with him, or he was with me a lot because he didn't keep me away from my office any more than he had to, but he would come down there. The other thing I will say is that Gordon Blake was very well versed in intelligence. While we had had some good directors, certainly General Canine was the greatest manager I ever knew -

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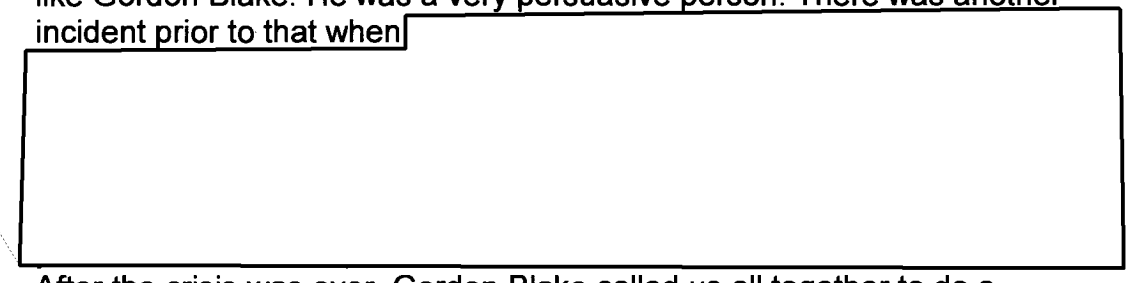
the greatest leader of man - Gordon Blake was a good intelligence man, and he was, in my experience, the first director that I ever worked with or had any experience around that seemed to really know and understand the intelligence racket. I kept thinking how thankful we should be as an agency to have him at that time. It was also very inspiring. So this sounds very much like Gordon Blake. He was a very persuasive person. There was another incident prior to that when



After the crisis was over, Gordon Blake called us all together to do a critique. He did the critique. He led off and actually wrote up the results of the critique, and I've always wished we could have it for anyone who is going over the Cuban crisis. I know you've tried to find it.

Hatch: That report is missing. I have not been able to locate a copy anywhere.

Moody: Yes. It should be in his files. He did it, and he did it personally.

Hatch: The Director's files back then have been dispersed.

Moody: And he went over all the things we did, and what we did right, and what we wrong, what we might have done better had there been, you know, the "what if" kind of situation, and it was very well done, and I think on a very positive basis. I think that the Cuban crisis experience for the agency allowed us to take advantage of everything that we had learned during World War II and in post-World War II, a la freehand days. But I think even more to the point a lot of what we had planned for and actually built in the way of our evolving SIGINT system was based on theory, and here we had an actual case. I know I vowed that as long as I had anything to do with it, and I felt that every day of my career in the agency from the Cuban crisis on what I did in the course of those days were affected by my experience at that time, things that I had vowed that we would try to do something about. The first was some kind of a national center, some place where everything could come together at one point in the agency where the director could have control and where we could give actual - and switch on a flexible basis - direct support to anyone looking to us for support on any problem, where we could have flexibility also, in so far as the system goes, of moving resources on a more flexible basis than we ever had. We started more and more then to get into producing SIGINT reports as opposed to individual items, that is combining information and putting in a report form.

Hatch: Wrap-up and consolidated reports, summary reports.

Moody: Right. Some people would say, well why did it take so long? We immediately set out to build what evolved into an NSOC. Do we still call it NSOC? (Yes) Okay. But our first go at it, the NSA Command Center, didn't get off

the ground because... I now want to talk about another problem we had in NSA. We sometimes called it... I know General Morrison referred to it as the "warlord" problem. The Command Center was defeated by the warlords, the warlords being the operating chiefs in PROD who felt that this central control, this central system, would take away from their autonomy and their prerogatives in their areas. So our first attempt at a command center faltered, although we did make some progress. I don't want to underestimate what we did do. Having mentioned that I had taken the responsibility for A Group product as well as ours during this crisis eventually, and this was in '64 or '65... well, let me back up a little bit. Having found that General Blake was interested in intelligence and having a system for seeing what was coming out of our product and knowing... and he having been briefed every day on the basis of product in the area, he invited me to continue... in fact, he started a system then; never before had we had it where every morning he would meet briefly with his chiefs up in the Director's Conference Room and have a quick go-around-the-table for developments in the areas. Then I would sit down with him and go over the highlights of the products that I had collected under my (1G). He liked that, and we continued to do that. Ultimately Buffham, who was then the chief of A problem, and Zaslow was B, and I who had something called G1, the Independent Office - that was the G problem - got together and decided that we were going to publish highlights of SIGINT produced in the agency if we could get away with it. So we wrote a document saying that on such-and-such a date we had planned to launch this publication unless otherwise directed, and we sent it up the line, and we didn't hear the other shoe fall, so we went with it. And we didn't have our command center then, so what they would do is bring their product... we had our analysts sit down together each night and produce this thing. So that's how we got started with the... some call it the "Green Hornet." I think we called it the "Green Dragon" in the very beginning, at least I think Buff and Milt and I did, or some people downtown called it the "Green Dragon," I believe. So that was a big day. Now, we got the command center going, and then we reorganized again in 1966. Again they came up with G, A, and B. I was moved to something called P2 where I was supposed to do something about customer relations, and getting closer to the customer, and our own reporting timeliness and quality, distribution, and all that. So it was then that I started working as close as possible with our downtown agencies. I made arrangements to put somebody downtown to sit with the people in the State OPSCEN and a little later on at CIA and the DCI. And then the White House had decided they could never be left in the kind of dilemma they were in so the White House set up a Situation Room, and the State Department Ops Center was invited down to the Situation Room, and by then we had cultivated a close enough relationship with them (that) they asked me to send someone along.

Hatch: That was Dave McManis?

Moody: Yeah. Before you know it our rep was the director of the White House

Situation Room, and in fact, he was the one who planned the communications. He was a help because, let me tell you, we put everything this agency had behind helping get the right system. There was a young man named Ben (B% Erdmann) that was from... he was good in computers and communications and that sort of thing. So we had somebody from the White House Communications Center, from the National Military Command Center, which was being upgraded and souped up, and I also put a rep down there to work with them, and the State Department, and our people. In fact, the agency supported me in providing people from TCOMM and R&D, and wherever we needed them to help build a facility. The idea was, not that the White House could be buried in anybody's intelligence or raw intelligence, but items of immediate and particular interest would have a way of getting there and getting attention on a timely basis. This paid off beautifully. The other problem was I didn't want to see every agency devise its own system. We had this old COINS system which was a collateral information exchange system that had been a system of getting everybody together, and had been underway, but then I talked with Mr. Kirby, who was the director of PROD then, about going with a single system to the agencies. We had security considerations and all that. So we came up with a plan for what we call the SIGINT On-Line Information System, SOLIS. But I can tell you that I gave that plan to Mr. Kirby in 1966 immediately after I got this overall charge, and when I left the agency in '76 it still wasn't operational. It was right on the verge, but it still wasn't... and I was disappointed... I felt that we were ready, but it just wasn't quite ready, knowing that that was really what had to be. I feel that we were having very good success in sitting down, holding our customer's hand, getting to know their needs, and working back and forth. This wasn't always... this was not easy. We sort of invited ourselves in.

Hatch: I know there was a lot of resistance.

Moody: And then every opportunity that we would have where somebody would ask us for SIGINT I would, and I had the support of the agency behind me, go say, "Hey, how about if I send Mr. or Mrs. so-and-so to sit down with you and show you what we can do and how we can do it," and open this channel to the point where ultimately we had people down in the Treasury, and in some of the commands. They even had somebody down at the DEA. Everybody that was looking to us for SIGINT and was cleared to have SIGINT, and it made a big difference. I had... in fact in the days when we were in (B% ADWA), and I mentioned to you earlier about the problems of going back and editing traffic, trying to find the proper color of crayon, the poking and repoking, and then the work we did on the [redacted] problem using it as a toy to do something with bringing raw intercept data in and formatting it at the point of intercept. So I was invited to brief the NSASAB at one point back during the days when I was still on the Soviet problem, and the thrust of what I was saying to them was that... I called my briefing something like a cryptologist's dream, and the dream would be to take every analyst all along the way at every stage of the SIGINT process up, through, to, and including

handing the product to the user into consideration, and doing something about it back at the earliest possible point, that being the point of intercept, and having a system which all analysts, for whatever reason - the traffic analysts, or the cryptanalyst, or the linguist - if he needed to get back to this data, or streams or part of the data, and the product if there was data that went with it, certainly broken out into whatever parcels necessary to get it, but we had not at this point gotten... we were getting there, but it was piecemeal and some of it was not compatible, and this was what (1G). Later on in the course of this P2 charge that I had - and then different charges came and went; I believe Oliver Kirby had been the Director - General Morrison came along, and then we upgraded NSOC. He charged me with putting together what we needed to push the button to go with the upgrade in NSOC. I was on his staff; I was P2. And when I called the "warlords" in to assist me in doing this, they said, "We ain't going to do this. You're going to mess up our playhouse." They didn't say those words, but that's what it amounted to. I got nowhere with that, so I went back and said, "Hey, you're just going to have to say this is the way it's going to be. I mean, they all know; everybody knows this is what has to happen." So he said all right. So he did do that. I will give him credit for taking... of course, the director told us to do this. And we were to do it. So he brought Dick Lord into my office - Lord came back from the War College - and set him in a little office next door to me, and he drew the plan up which at this point it's going to happen. It's going to be a fait accompli. That's what we did. Shortly after we got the NSOC... and again, it would have been like the second generation which has now been improved and improved. We had still another director, and I would say this would be like '71 or '72, General Phillips. He was a dynamic, powerful director, but he was with us only a short time. So he directed that a study group to take everything that needed to be done and put together in a package of recommendations be convened, and the study group consisted of Bob Hermann as the chairman. In the meantime, Bob Hermann by then had gotten to be... we could really work together. In the early days I had a lot of arguments with Bob who said that operations people shouldn't have anything to say about R&D, you know, they should do their end, so we would go around and around. We had been on many committees on many different problems, but we both came a long ways. I came over to his side some, and he came over to mine. So then they threw this committee together, and we had people from every different aspect again in the SIGINT process on this committee, and he was the chairman. I was the cochairman. I can't remember the dates specifically. I know how we could get to it, because I remember Bob's father was ill and died during the course of this, and I had to carry on in his absence through part of the work that we were doing, because we had a deadline to get this job done, so we worked (B% manually on)... but there we got to lay out in a document this dream of one system to shoot toward. By then we knew that every aspect of it... we had it by the tail. It was just a matter of getting... and as a recommendation, and then another reorganization followed that, and that reorganization took

place in '73, I believe, didn't it?

Lichty: Actually in '74. I think so because in '73 I moved to... I remember the job and what had happened because I moved from team to branch like that overnight.

Moody: It was at least '73. In the meantime, we just were getting all kinds of good working relations with the community by then. We had direct service. We couldn't move anything that needed to go to anybody anywhere and get it to the right people. But in this reorganization it was decided to put the operational... a strange and wonderful thing called B Group was created along with the analytic groups, and I was put in charge of B, again having this interface with the community as a responsibility; also the interface with the PROD elements and control over the support that it took to get this communications system in and out of the NSOC going. Of course by then we were doing a lot in the reporting, taking hold of the requirements process, and taking hold of quality control; sometimes making people unhappy by deigning to tell them that their product wasn't what it should be, and trying to improve the quality of the product, and of course briefing the director on a daily basis, and running the NSOC, running a briefing team, and getting more and more demands from all over. So it was a busy and very interesting time. I guess this is a good stopping place for the time being.

Hatch: Okay. Thank you. What classification would you put on this tape? Do you think Top Secret Codeword would cover it, or should there be any special caveats for the interview that we've had today?

Moody: First of all, you're speaking from someone who's out of what's going on.

Hatch: Yeah. I didn't notice anything specially compartmented.

Moody: I believe TOP SECRET CODEWORD would cover it, because even though I've gotten into things that border... you know, I've always thought we sometimes get carried away with classifications, and we do ourselves an injustice by doing so. I don't think I've done... in fact, I've deliberately attempted to skirt around. I'm sure you know there are a lot of very strange and wonderful compartmented things that went on, and particularly in these later... you know, as I went on, I had all these clearances hanging around my neck to the point that it would take a computer to keep up with them.

Hatch: I know. We see some of these documents come by with half the page with caveats on them. Well, we'll call this tape TOP SECRET CODEWORD then. I think we'll use that.

[END OF INTERVIEW OH-1994-32-MOODY]